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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/615,581

07/08/2003

Otman A. Basir

60,449-072

8290

26096

7590

02/15/2005

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EXAMINER

DEB, ANJAN K

ART UNIT

PAPER NUMBER

2858

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/615,581	<b>Applicant(s)</b> BASIR ET AL.	
	<b>Examiner</b> Anjan K. Deb	<b>Art Unit</b> 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/08/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,11-13,16 are rejected under 35 U.S.C. 102(b) as being anticipated by Stanley US (6,703,845 B2).

Re claim 1,11,16 Stanley discloses an occupant classification system (occupant size and position)(column 2 lines 25-34) and method comprising at least one load sensor (weight sensor) for determining an amount of load on a vehicle seat, and at least one occupant presence detection (OPD) sensor for determining whether the load is animate (human body) (column 4 lines 60-65). Re claim 16, Stanley discloses determining position of the head (out of position)(proximity of object)(column 5 lines 2-5, column 6, lines 12-22, column 7 lines 48-50).

Re claims 2,12,13 Stanley discloses OPD sensor measures capacitance of the load (column 4 lines 60-65).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2858

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-8,14-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over

Stanley US (6,703,845 B2) in view of Owechko (US 6,801,662 B1).

Re claims 3-8,14-15 Stanley disclosed all of the claimed limitations as set forth above except head-tracking system (HTS) for determining a position of a head of an occupant of the vehicle seat.

Owechko disclosed head-tracking system (HTS) for determining a position of a head of an occupant of the vehicle seat for detecting occupant out of position (OOP) situation.

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Stanley by adding head-tracking system disclosed by Owechko for determining a position of a head of an occupant of the vehicle seat for detecting occupant out of position (OOP) situation.

Re claim 5, Stanley discloses occupant classification system wherein the system determines that a child seat is present on the vehicle seat based upon the at least one load sensor determining the amount of the load on the vehicle seat exceeds an empty seat threshold (column 5 lines 6-16) and based upon the OPD sensor indicating that no occupant is present (column 4 lines 24-35).

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Re claim 6, Stanley discloses an array of capacitive sensors (spaced electrodes 64)(Fig. 4).

Re claim 7, Stanley discloses the position of the head to a position of the vehicle seat to determine an inclination (position) of the occupant (out of position)(column 5 lines 2-5).

Re claims 8,15 Stanley did not expressly disclose that the weight of the occupant is determined based upon the inclination of the occupant but would have been obvious to do so since Stanley disclosed that both weight and position of occupant are used for controlling deployment of airbag.

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Stanley and Owechko by adding weight determination based upon the inclination of the occupant for accurately determining occupant position.

5 . Claims 9,10,18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanley US (6,703,845 B2) and Owechko (US 6,801,662 B1) in view of Breed (US 6,412,813 B1).

Re claims 9,10,18-20 Stanley and Owechko disclosed all of the claimed limitations except seatback angle sensor.

Breed disclosed method and system for detecting a child seat comprising seatback angle sensor.

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Stanley and Owechko by adding seatback angle sensor disclosed by Breed for detecting occupant is a child seat.

6. Claim 17, is rejected under 35 U.S.C. 103(a) as being unpatentable over Stanley US (6,703,845 B2).

Re claim 17, Stanley disclosed all of the claimed limitations except determining that occupant is lying against a back of seat. However it would have been obvious to do so because Stanley disclosed determining the position of occupant.

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Stanley by adding determining that occupant is lying against a back of seat because Stanley disclosed determining the position of occupant.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Howing (US 5,525,843) discloses seat occupant detection system comprising capacitance sensor.

Lester (US 6,646,452 B2) disclose capacitance type occupant load (weight) sensor.

Basir et al. (US 6,678,600 B2) disclose vehicle occupant classification system comprising child seat detection system using an array of capacitance type proximity sensors.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Anjan K. Deb whose telephone number is 571-272-2228. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lefkowitz Edwards can be reached at 571-272-2180.



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2/10/05

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